

762-011

Dart Aerospace Ltd.

Date: Tuesday, 06/01/2009 10:02:02 AM  
 User: Julie Dawson

## Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : BK117 SKIDTUBE ASSEMBLY  
 Job Number : 44387A  
 Estimate Number : 12898  
 P.O. Number :  
 This Issue : 06/01/2009 S.O. No. :  
 Prsht Rev. : NC Part Number : D117762041  
 First Issue : // Type : SKIDTUBES Drawing Number : D3582 REVA  
 Previous Run : 42524A Drawing Revision : A  
 Material :  
 Due Date : 31/01/2009 Qty: 1 Um: Each  
 Written By :  
 Checked & Approved By : JLD 09-01-06  
 Comment : Est Rev:A 07.06.11 New Issue EC  
 Est Rev:B 08-02-22 change to revA as per dwg DD verified by:EC

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
1.0	DC	DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Photocopy bluefile &amp; type labels per PPP D117-762-041 CHG001

N/A 9/1

2.0

D2962150

3.540 Outer Tube, Extrud



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D2962-150

Extrusion

B-28672

NB 09-01-06

3.0

SKIDTUBES 1

SKIDTUBESS RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Determine square end of tube and deburr

2-Drill #30 pilot holes using DT8678. Do not open holes.

3- Deburr holes.

NB  
09-01-06

4.0

BENDING

BENDING MACHINE - SKIDTUBES



Comment: BENDING MACHINE

Bend tube as per program on CNC Bender and Dwg D3582. Use 5/16" locator pin on buggy "A".

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

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Job Number: 44387A

Part Number: D117762041

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

SKIDTUBES 1

SKIDTUBESS RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Cut Fwd end of the tube using DT8185

2-Cut Aft end at VC using DT8185

3-Deburr ends

4-Drill Aft Cap holes using DT8678 \*\*\*DO NOT OPEN AFT CAP HOLE\*\*\*

5-Locate DT 8973 & Drill Ground wire hole on top of Tube.

6-Install 3/16 cleco in Ground wire hole ,then drill all X-Bolt holes using 3/16" drill.

7-Drill pilot holes for wearplates using DT8974

8-Open wearplate holes to Ø19/64" (0.297") as per Dwg D3582

9- open ground wear holes to 0.3915 as per section B-B

10-Open Aft Cap holes using .209" drill.

11-Deburr holes.

MB 09-01-06

pmc 09-01-07

6.0

D2964

Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Cap

Batch:

214/01

BE 09/01/07

7.0

SKIDTUBES 1

SKIDTUBESS RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Weld fwd cap D2964 per dwg D3582 and QSI 004

A/R AL ROD

Batch:

m109560/m109213

BE 09/01/07

2-Grind flush

pmc 09-01-08

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Part Number: D117762041

Job Number:



Seq. #:	Machine Or Operation:	Description :
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8.0	QC10	VISUAL INSPECTION OF GROUND WELDS
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Comment: VISUAL INSPECTION OF GROUND WELDS

S 09/01/08 (X)

9.0	QC5	INSPECT WORK TO CURRENT STEP
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Comment: INSPECT WORK TO CURRENT STEP

S 09/01/08 (X)

10.0	HAND FINISHING1	HAND FINISHING RESOURCE #1
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Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

PM 09-01-08

11.0	QC3	INSPECT POWDER COAT/CHEMICAL CONVERSION
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Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

BE 09-01-08

12.0	D2971	Cross Bolt Spacer
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Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Cross Bolt Spacer

batch

B 39001

BE 09/01/12

13.0	D2973	Cross Bolt Spacer
------	-------	-------------------



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Cross Bolt Spacer

Batch

B 14636

BE 09/01/12

14.0	D36621	Crossbolt Spacer
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Comment: Qty.: 3.0000 Each(s)/Unit Total: 3.0000 Each(s)

SPACER

batch

B 39585

BE 09/01/12

15.0	D36623	Crossbolt Spacer
------	--------	------------------



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

SPACER

batch

B 37190

BE 09/01/12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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Part Number: D117762041

Job Number:



Seq. #:

Machine Or Operation:

Description :

16.0

D35841

Web



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)  
WEB

B42534

Amc 09-01-08

17.0

SKIDTUBES 1

SKIDTUBESS RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Open X-Bolt holes to .750"(4Places) as per Dwg D3582, section B-B

Amc 09-01-08

2-Counter Sink X-BOLT holes as per Dwg D3582

3-Deburr and blow out chips from inside of tube.

4-Bond web as per Dwg D3582 & QSI 015

A/R 241 Sike Flex Batch: M109483

Exp Date: 09-07-11

5-Weld x-bolt spacers(D2973) as per Dwg D3582 section B-B.

A/R AL ROD Batch: M109560 25-09/01/12

6-Grind welds flush

Amc 09-01-13

Amc 09-01-08

Tools: E

18.0

QC10

VISUAL INSPECTION OF GROUND WELDS



Comment: VISUAL INSPECTION OF GROUND WELDS

S 09/01/21 (X)

19.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

S 09/01/21 (X)

20.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

M 109996

START TIME:

15:45

OVEN TEMPERATURE:

320°

FINISH TIME:

16:45

BL 09-07-09

Fx 09/02/09 (1)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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Part Number: D117762041

Job Number:



Seq. #:

Machine Or Operation:

Description :

21.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



HL



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

09-02-11

(R)

22.0

ALS41032130

Insert



Comment: Qty.: 36.0000 Each(s)/Unit Total: 36.0000 Each(s)

Insert

Batch: M1086006

MD/FX

09/02/11

23.0

ALS4428165

Inserts



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Inserts

batch M16989

\*\*\*same as ALS7-428-165 QSI 0017 \*\*\*

MD/FX

09/02/11

24.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Install Wearplate & Ground Wire inserts as per Dwg D3582.

MD

/FX

09/02/11

25.0

D2965

Cap, 105 Skidtube



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Cap

Batch: B456116

MD/FX

09/02/11

26.0

D35083

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

WEARPLATE

Batch: B42250

MD/FX

09/02/11

27.0

D35089

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

WEARPLATE

Batch: B40359

MD/FX

09/02/11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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Job Number: 44387A

Part Number: D117762041

Job Number:



Seq. #:

Machine Or Operation:

Description :

28.0

D350811

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Batch: B3641-5

\* WEARPLATE

UMD / FL

09/02/11

29.0

D350813

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

WEARPLATE

Batch: B38528

UMD / FL

09/02/11

30.0

D35583

Gasket



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

GASKET

Batch: B42253

UMD / FL

09/02/11

31.0

D35589

Gasket



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

GASKET

Batch: B40361

UMD / FL

09/02/11

32.0

D355811

Gasket



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

GASKET

Batch: B40399

UMD / FL

09/02/11

33.0

D355813

Gasket



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

GASKET

Batch: B42255

UMD / FL

09/02/11

34.0

AN3C4A

BOLT



Comment: Qty.: 28.0000 Each(s)/Unit Total: 28.0000 Each(s)

BOLT

Batch: M110468

UMD / FL

09/02/11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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Drawing Name: BK117 SKIDTUBE ASSEMBLY

Job Number: 44387A

Part Number: D117762041

Job Number:



Seq. #:	Machine Or Operation:	Description :
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35.0	AN3C5A	Bolt
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Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Bolt

Batch: M110468

UMD / FL

09/02/11

36.0	AN44A	Bolt
------	-------	------



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Bolt

batch: M108138

UMD / FL

09/02/11

37.0	AN960C10L	washer
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Comment: Qty.: 28.0000 Each(s)/Unit Total: 28.0000 Each(s)

washer

Batch: M110023

UMD / FL

09/02/11

38.0	AN960JD10L	Washer
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Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Washer

batch: M109632

UMD / FL

09/02/11

39.0	AN960JD416L	Washer
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Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Washer

batch: M108583

UMD / FL

09/02/11

40.0	NAS1611012	O-RING
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Comment: Qty.: 1.0000 Each(s)/Unit Total: 60000 Each(s)

O-RING

batch: M108038 (x4)

M1081673 (x2)

UMD / FL 09/02/11

41.0	NAS1611015	O-RING
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Comment: Qty.: 1.0000 Each(s)/Unit Total: 2.0000 Each(s)

O-RING

batch: M107178

UMD / FL

09/02/11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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Job Number: 44387A

Part Number: D117762041

Job Number:



Seq. #:	Machine Or Operation:	Description :
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42.0	NAS1611016	O-RING
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Comment: Qty.: 1.0000 Each(s)/Unit Total: 2.0000 Each(s)

O-RING

batch: m107178

umd / FL

09/02/11

43.0	D3492049	Plug Assembly
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Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

PLUG ASSEMBLY

batch: B40356

umd / FL

09/02/11

44.0	D3492051	Plug Assembly
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Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

PLUG ASSEMBLY

batch: B39723

umd / FL

09/02/11

45.0	D3492053	Plug Assembly
------	----------	---------------



Comment: Qty.: 6.0000 Each(s)/Unit Total: 6.0000 Each(s)

PLUG ASSEMBLY

batch: B44063

umd / FL

09/02/11

46.0	HAND FINISHING1	HAND FINISHING RESOURCE #1
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Comment: HAND FINISHING RESOURCE #1

1-Inspect for Foreign objects

2-Install Aft cap as per Dwg D3582, Detail "C"

A/R 241 Sika Flex Batch: m109883  
Exp Date: 09/11

3-Install Wearplates as per Dwg D3582,

Note: Install Bolt and washer on Ground Wire inserts on top of tube see section D-D of dwg D3582

\*\*\*\*\*Do not install bolts where indicated on Dwg(Note #6)\*\*\*\*\*

A/R 241 Sika Flex Batch: m109883  
Exp Date: 09/11

4-assemble o'ring as per dwg D3492 and apply o'ring lube

A/R 55-o'ring lube batch: m101223

umd / FL

09/02/11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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Part Number: D117762041

Job Number:



Seq. #:

Machine Or Operation:

Description :

5- Wing Walk as per Dwg D3043 and QSI 005 4.4

1110454

09-02-11

(X)

47.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

5096214 (X)

48.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D117-762-041

Location: \_\_\_\_\_

PPP Rev: \_\_\_\_\_

RM

44387

09/2/12

(X)

49.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

09/02/2009

Job Completion



MF 09-02-19

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

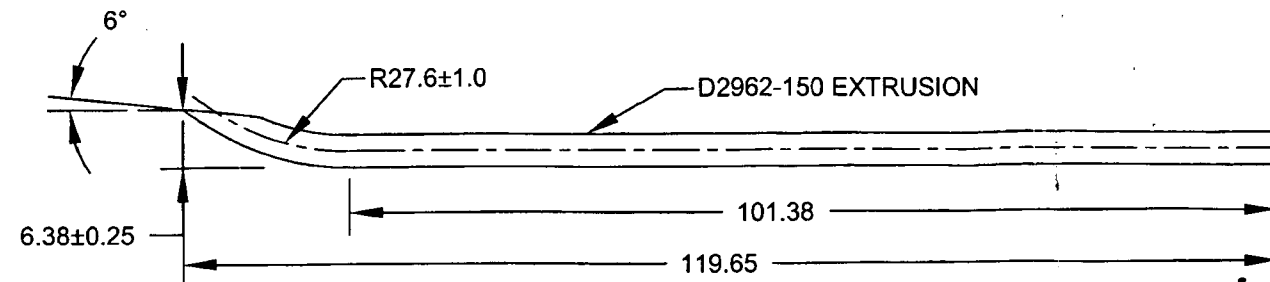
**NOTE:** Date & initial all entries

# PARTS LIST FOR D3582-041 SKIDTUBE ASSEMBLY

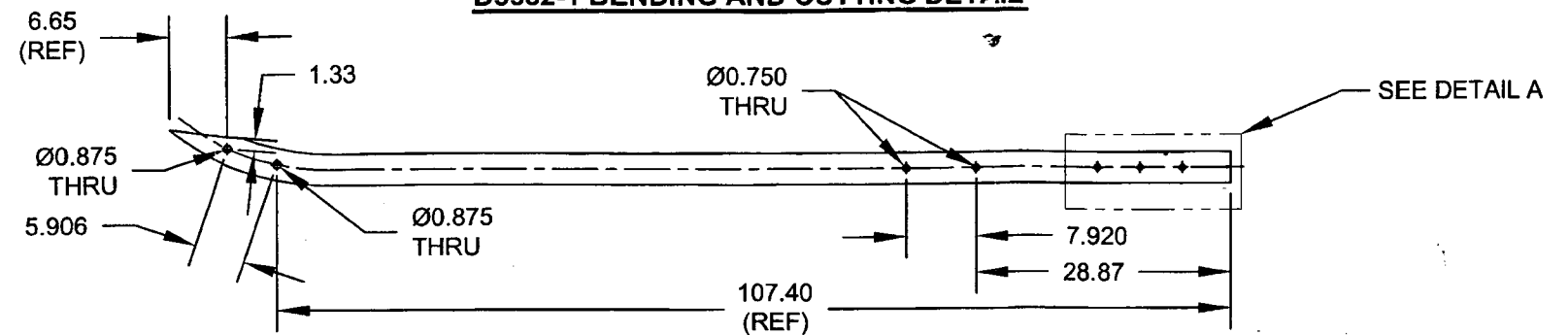
Qty	Part Number	Description
X	D3582-041	SKIDTUBE ASSEMBLY
1	D2962-150	EXTRUSION
1	D2964	CAP
1	D2965	CAP
1	D2971	CROSS BOLT SPACER
2	D2973	CROSS BOLT SPACER
2	D3492-049	PLUG ASSEMBLY
2	D3492-051	PLUG ASSEMBLY
6	D3492-053	PLUG ASSEMBLY
1	D3508-3	WEARPLATE
1	D3508-9	WEARPLATE
1	D3508-11	WEARPLATE
1	D3508-13	WEARPLATE
1	D3558-3	GASKET
1	D3558-9	GASKET
1	D3558-11	GASKET
1	D3558-13	GASKET
1	D3584-1	WEB
3	D3662-1	CROSS BOLT SPACER
1	D3662-3	CROSS BOLT SPACER
36	AELS-1032-130	INSERT
2	ALS7-428-165	INSERT
28	AN3C4A	BOLT
2	AN3-5A	BOLT
2	AN4-4A	BOLT
28	AN960C10L	WASHER
2	AN960JD10L	WASHER
2	AN960JD416L	WASHER

## GENERAL NOTES:

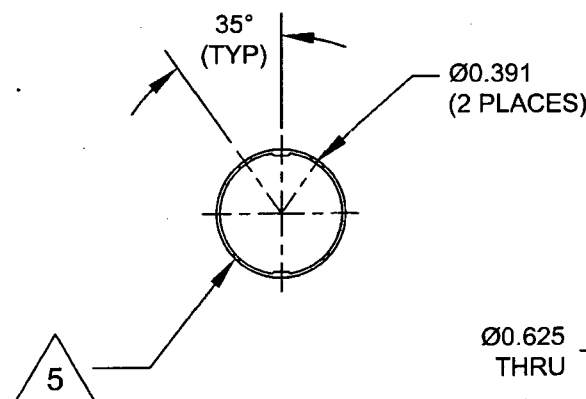
- ALL DIMENSIONS ARE IN INCHES
- TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- WELDING TO BE DONE PER DART QSI 004.
- INSERT D3584-1 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015 AFTER BENDING.
- USE DART DRILL TEMPLATE DT8900 TO LOCATE AND DRILL  $\varnothing 0.297$  HOLES (36 PLACES) FOR WEARSHOE INSERTS. INSTALL AELS-1032-130 PER SECTION G-G (36 PLACES) AFTER FINISH. SEAL WEARPLATE BOLTS WITH SIKAFLEX-241/-291.
- DO NOT INSTALL AN3C4A BOLTS AND AN960C10L WASHERS IN INDICATED LOCATIONS.
- FINISH:
  - CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSERTING D3584-1 WEB.
  - POWDER COAT ASSEMBLY GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3.
  - ANTI-SKID PAINT AS INDICATED TO 1.00 ABOVE CENTER LINE PER DART QSI 005 4.4



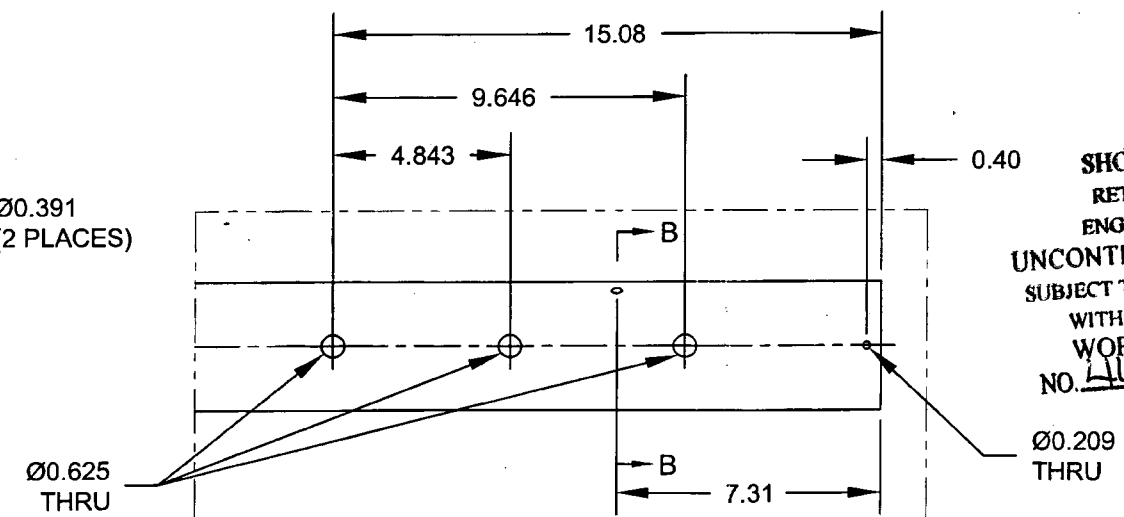
D3582-1 BENDING AND CUTTING DETAIL



D3582-1 DRILLING DETAIL



SECTION B-B  
SCALE 1:5



DETAIL A  
SCALE 1:5

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 41351A

RELEASED  
07.11.22

A	NEW ISSUE	PH	07.06.08
REV.	DESCRIPTION		BY DATE
DESIGN	24	DART AEROSPACE USA, INC PORT HADLOCK, WA	
DRAWN	PH		
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D3582	SHEET 1 OF 2
APPROVED		TITLE	SCALE
DE APPR.		BK 117 SKIDTUBE ASSEMBLY	1:20
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D2964 CAP  
(GRIND FLUSH)

**DETAIL C**  
SCALE 1:10

D2971 SPACER

AFTER FINISH  
INSTALL,  
D3492-049  
PLUG ASSEMBLY  
(2 PLACES)

**SECTION D-D**  
SCALE 3:10

AFTER FINISH  
INSTALL,  
D3492-051  
PLUG ASSEMBLY  
(2 PLACES)

**SECTION E-E**  
SCALE 3:10

D3662-3 SPACER

**SECTION D-D NOTES**

AFTER BENDING AND DRILLING ASSEMBLY  
PERFORM THE FOLLOWING:

1. CHAMFER HOLE 0.030 x 45°
2. INSERT D2971 SPACER
3. WELD INTO PLACE AND GRIND FLUSH
4. PASS Ø0.750 DRILL TO REMOVE SPILL OVER
5. AFTER FINISH, INSTALL D3492-049 PLUG ASSEMBLY (2 PLACES)

**SECTION E-E NOTES**

AFTER BENDING AND DRILLING ASSEMBLY  
PERFORM THE FOLLOWING:

1. CHAMFER HOLE 0.030 x 45°
2. INSERT D3662-3 SPACER
3. WELD INTO PLACE AND GRIND FLUSH
4. PASS Ø0.672 DRILL TO REMOVE SPILL OVER
5. AFTER FINISH, INSTALL D3492-051 PLUG ASSEMBLY (2 PLACES)

DETAIL C

D3558-9  
D3508-9

NO BOLTS AT  
THESE LOCATIONS

D3558-3

D3558-11

D3508-3

D3508-11

DETAIL H

D3558-13

D3508-13

NO BOLTS AT  
THESE LOCATIONS

**D3582-041 ASSEMBLY DETAIL**

BLACK ANTI-SKID

BLACK ANTI-SKID (TYP)

**D3582-041 BLACK ANTI-SKID DETAIL**

SHOP COPY  
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WITHOUT NOTICE

WORK ORDER

NO 44387A

SEAL WITH  
SIKAFLEX -241/-291

D2965 CAP

**DETAIL H**  
SCALE 1:5

**RELEASED**

D2973 SPACER  
(2 PLACES)

**SECTION F-F**  
SCALE 3:10

**SECTION F-F NOTES**

AFTER BENDING AND DRILLING ASSEMBLY  
PERFORM THE FOLLOWING:

1. CHAMFER HOLE 0.030 x 45°
2. INSERT D2973 SPACER (2 PLACES)
3. WELD INTO PLACE AND GRIND FLUSH
4. PASS Ø0.625 DRILL TO REMOVE SPILL OVER

D3584-1 WEB (REF)

D3662-1 SPACER  
(3 PLACES)

AFTER FINISH, INSTALL  
AELS-1032-130  
INSERT (36 PLACES)

AN3C4A BOLT (1)  
AN960C10L WASHER (1)  
(28 PLACES)

**SECTION G-G**  
SCALE 3:10

AFTER FINISH, INSTALL  
ALS7-428-165 INSERT (1)  
AN4-4A BOLT (1)  
AN960JD416L WASHER (1)  
(2 PLACES)

AFTER FINISH  
INSTALL,  
D3492-053  
PLUG ASSEMBLY  
(6 PLACES)

**SECTION G-G NOTES**

AFTER BENDING AND DRILLING ASSEMBLY  
PERFORM THE FOLLOWING:

1. CHAMFER HOLE 0.030 x 45°
2. INSERT D3662-1 SPACER (3 PLACES)
3. WELD INTO PLACE AND GRIND FLUSH
4. PASS Ø0.515 DRILL TO REMOVE SPILL OVER
5. AFTER FINISH, INSTALL D3492-053 PLUG ASSEMBLY (6 PLACES)

DESIGN	PH	<b>DART AEROSPACE USA, INC</b>	
DRAWN	PH	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D3582	SHEET 2 OF 2
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2973

14630

NO. 169

AWS D17.1.2001  
QUALIFICATION TEST RECORD

Name: Barclay Elliot  
Job number: 40335A  
Part number: D117 762 041  
Description: Bk 117 skid  
Welding Process: Tig ☒ Mig ☐  
Base material: Aluminium  
Current: AC ☒ DC ☐

TEST REQUIREMENTS AND RESULTS

Visual: pass ☒ fail ☐  
Penetration: pass ☒ fail ☐

UNACCEPTABLE

Cracks: pass ☒ fail ☐  
Undercut: pass ☒ fail ☐  
Pin holes: pass ☒ fail ☐  
Overlap (cold lap): pass ☒ fail ☐  
Porosity (surface): pass ☒ fail ☐  
Coloration: pass ☒ fail ☐

Qualifier [Signature] Date of Test Coupon 08-08-21

Welder Barclay Elliot Date of Test Coupon 08-08-21

The above named individual is qualified in accordance with AWS D17.1.2001 to weld